Listing of Claims

1. (Currently amended.) A filamentary structure for the introduction of an agent into a living host, comprising a filament comprising a solid core and a porous sheath, wherein the solid core comprises a metal or an alloy and wherein the porous sheath comprises a bioabsorbable sheath polymer which coats at least a portion of the solid core.

2. Canceled.

3. (Previously presented.) The filamentary structure of claim 1, wherein when the solid core is made of a biocompatible material selected from the group consisting of metals or alloys containing the elements of iron, nickel, aluminum, chromium, cobalt, titanium, vanadium, molybdenum, gold, and platinum.

4. (Previously presented.) The filamentary structure of claim 1, wherein the bioabsorbable sheath polymer is selected from the group consisting of poly(lactic acid), poly(glycolic acid), poly(trimethylene carbonate), poly(amino acid)s, tyrosine-derived poly(carbonate)s, poly(carbonate)s, poly(caprolactone), poly(para-dioxanone), poly(ester)s, poly(ester-amide)s, poly(anhydride)s, poly(ortho ester)s, proteins, carbohydrates, poly(ethylene glycol)s, poly(propylene glycol)s, poly(acrylate ester)s, poly(methacrylate ester)s, poly(vinyl alcohol), and copolymers, blends and mixtures of said polymers.

5. (Previously presented.) The filamentary structure of claim 1, further comprising an agent.

6. (Previously presented.) The filamentary structure of claim 5, wherein the agent is living cells.

7. (Previously presented.) The filamentary structure of claim 6, wherein the living cells are obtained from hair follicles.

8. (Previously presented.) The filamentary structure of claim 6, wherein the living cells are genetically engineered cells.

9. (Previously presented.) The filamentary structure of claim 6, wherein the living cells are encapsulated.

10. (Previously presented.) The filamentary structure of claim 5, wherein the agent is cell signaling molecules.

11. (Previously presented.) The filamentary structure of claim 5, wherein the agent is selected from the group consisting of: growth factors, drugs, recombinant molecules, cell recognition factors, cell binding site molecules, cell attachment molecules, cell adhesion molecules, proteins, glycoproteins, carbohydrates, naturally occurring polymers, synthetic polymers, semi-synthetic polymers, and recombinant polymers.

12. (Previously presented.) The filamentary structure of claim 5, wherein the agent is coated on the outer surface of the porous sheath.

13. (Previously presented.) The filamentary structure of claim 5, wherein the agent is mixed, dissolved, or imbedded within the porous sheath.

14. (Previously presented.) The filamentary structure of claim 1, wherein porous sheath defines open pores which are substantially interconnected and large enough to admit the agent.

15. (Previously presented.) The filamentary structure of claim 14, wherein the open pores are large enough to admit molecules ranging in molecular weight from about 500 to about 100,000 Daltons.

16. (Currently amended.) A method of making a filamentary structure for introducing an agent into a living host, comprising the steps of:

a) providing a filamentary solid core,

b) providing a bioabsorbable polymer,

c) providing a pore-forming agent,

d) mixing said bioabsorbable polymer with the pore-forming agent,

e) coating said mixture onto the solid core,

f) substantially removing or decomposing the pore-forming agent; and

wherein the solid core comprises a metal or an alloy.

17. (Previously presented.) The method of claim 16, wherein the bioabsorbable polymer is poly(L/DL-lactide).

18. (Previously presented.) The method of claim 16, wherein the pore-forming agent provided in step (c) is azodicarbonamide.

19. (Previously presented.) The method of claim 16, wherein the pore-forming agent provided in step (c) is urea dicarboxylic acid anhydride.

20. (Previously presented.) The method of claim 16, wherein coating step (e) is performed by melt extrusion.

21. (Previously presented.) The method of claim 16, wherein coating step (e) is performed by additional steps comprising:

dissolving said bioabsorbable polymer in a polymer solvent to form a solution,

coating at least one end of the solid core by placing it in the solution, and

removing the solid core from the solution.

22. (Previously presented.) The method of claim 16, wherein the polymer solvent is also the pore-forming agent.

23-36. Canceled.

37. (Currently amended.) The filamentary ~~composition~~ structure of claim 4 wherein the protein is selected from the group consisting of collagen, gelatin, and serum albumin.